

Amendments to the claims

Please amend the claims as follows:

1. (Currently Amended) A therapeutic antibody that specifically binds to OSM, ~~particularly hOSM~~, and modulates the interaction between OSM and gp130.
2. (Original) The antibody according to claim 1 comprising a CDRH3 of SEQ.I.D.NO: 3.
3. (Original) The antibody of claim 2 further comprising;
CDRH1 of SEQ.I.D.NO: 1
CDRH2 of SEQ.I.D.NO: 2
CDRL1 of SEQ.I.D.NO: 4
CDRL2 of SEQ.I.D.NO: 5
CDRL3 of SEQ.I.D.NO: 6
4. (Original) The antibody according to claim 1 comprising a CDRH3 of SEQ.I.D.NO:42.
5. (Original) The antibody of claim 4 further comprising;
CDRH1 of SEQ.I.D.NO: 40
CDRH2 of SEQ.I.D.NO: 41
CDRL1 of SEQ.I.D.NO: 43
CDRL2 of SEQ.I.D.NO: 44
CDRL3 of SEQ.I.D.NO: 45.
6. (Currently Amended) The antibody according to ~~any one of claims 1 to 5~~ claim 1 wherein the antibody is selected from the group consisting of ~~intact~~, chimaeric, humanised, bispecific, and heteroconjugate.
7. (Original) The antibody according to claim 6 wherein the antibody is an intact antibody.

8. (Original) The antibody of claim 7 wherein the intact antibody is murine, rat, rabbit, primate or human.
9. (Original) The antibody of claim 8 wherein the intact antibody is human.
10. (Original) The antibody of claim 6 wherein the antibody is chimaeric or humanised.
11. (Original) The antibody of claim 8 wherein the antibody is humanised.
12. (Original) A humanised antibody of claim 2 wherein residues 28, 29, 30, 71 and 94 of the human acceptor variable heavy chain framework region and positions 49 and 71 of the human acceptor variable light chain framework are substituted by the corresponding residues in the donor antibody framework from which CDRH3 is derived.
13. (Currently Amended) The antibody of claim 12 wherein the human heavy chain framework comprises the following residues [()] or a conservative substitute thereof[()]:

Position	Residues
28	S
29	L
30	T
71	K
94	K

and the human light chain comprises the following residues [[()]or conservative substitute thereof[()]]

Position	Residues
49	E
71	Y

14. (Currently Amended) A humanised therapeutic antibody of claim 1 which specifically binds hOSM and modulates the interaction between hOSM and gp130 comprising a V_H domain of SEQ.I.D.NO: 9 and a V_L domain of SEQ.I.D.NO: 10.

15. (Currently Amended) A humanised therapeutic antibody of claim 1 which specifically binds hOSM and modulates the interaction between hOSM and gp130 comprising a heavy chain of SEQ.I.D.NO: 11 and a light chain of SEQ.I.D.NO: 12.

16. (Currently Amended) A humanised therapeutic antibody of claim 1 which specifically binds hOSM and modulates the interaction between hOSM and gp130 comprising a V_H domain of SEQ.I.D.NO: 48 and a V_L domain of SEQ.I.D.NO: 49

17. (Currently Amended) A humanised therapeutic antibody of claim 1 which specifically binds hOSM and modulates the interaction between hOSM and gp130 comprising a heavy chain of SEQ.I.D.NO: 50 and a light chain of SEQ.I.D.NO: 51.

18. (Currently Amended) A therapeutic antibody according to ~~any preceding claim~~ claim 1 further comprising a human heavy chain constant region selected from the group consisting of; IgA1, IgA2, IgD, IgE, IgG1, IgG2, IgG3, IgG4, and IgM.

19. (Currently Amended) A therapeutic antibody according to claim 18 wherein the constant region is of an IgG isotype ~~e.g. IgG1 or IgG4~~.

20. (Original) A therapeutic antibody according to claim 19 wherein the constant region is IgG1.

21. (Original) A therapeutic antibody according to claim 20 wherein the constant region is mutated to render the antibody non-lytic.
22. (Currently Amended) The therapeutic antibody of ~~any preceding claim~~ claim 1 wherein said antibody modulates an ~~the~~ interaction between Site II of hOSM and gp130.
23. (Original) A therapeutic antibody of claim 22 wherein said antibody inhibits said interaction.
24. (Original) The antibody of claim 23 wherein said antibody blocks said interaction.
25. (Currently Amended) An antigen binding fragment of the therapeutic antibody of ~~any preceding claim~~ claim 1.
26. (Original) A fragment according to claim 25 wherein said fragment is selected from the group consisting of; Fab, Fab', Fd, F(ab)₂, ScFv.
27. (Original) A pharmaceutical composition comprising a therapeutic antibody or antigen binding fragment thereof according to claim 1.
28. (Original) A method of treating a human patient afflicted with a disease or disorder responsive to modulation of the interaction between hOSM and gp130, said method comprising the step of administering to said patient a therapeutically effective amount of the composition of claim 27.
29. (Original) A method of treating a human patient afflicted with a chronic inflammatory disease or disorder said method comprising the step of administering to said patient a therapeutically effective amount of the composition of claim 27.
30. (Original) A method of treating a human patient afflicted with an arthritic disease or disorder said method comprising the step of administering to said patient a therapeutically effective amount of the composition of claim 27.

31. (Original) A method according to claim 30 wherein said patient is afflicted with rheumatoid arthritis and/or osteoarthritis.

32. (Currently Amended) A method of treating a human patient afflicted with an inflammatory lung disease ~~such as asthma or COPD~~, said method comprising the step of administering to said patient a therapeutically effective amount of the composition of claim 27.

33. (Original) A method of treating a human patient afflicted with psoriasis, said method comprising the step of administering to said patient a therapeutically effective amount of the composition of claim 27.

34. (Currently Amended) A method of treating a human patient afflicted with a cardiovascular disease or disorder ~~such as atherosclerosis which~~ said method comprising the step of administering to said patient a therapeutically effective amount of the composition of claim 27.

35. (Original) A method of treating a human patient afflicted with Kaposi sarcoma which method comprising the step of administering to said patient a therapeutically effective amount of the composition of claim 27.

36. (Currently Amended) A method of modulating an ~~Use of a therapeutic antibody or antigen binding fragment of any one of claims 1 to 26 in the manufacture of a medicament for the treatment of a disease responsive to modulation of the interaction between hOSM and gp130 in a patient suffering from a disease responsive to the modulation of said interaction comprising administering a medicament comprising an antibody or antibody binding fragment thereof of claim 1 to said patient~~ such as rheumatoid arthritis, osteoarthritis, psoriasis, asthma, COPD.

37. (Currently Amended) A medicament comprising the therapeutic antibody or antigen binding fragment of ~~any one of claims 1 to 20~~ claim 1.

38. (Currently Amended) A vector (~~e.g. plasmid~~) encoding the heavy chain and/or light chain of the therapeutic antibody or antigen binding fragment thereof of claim 1 ~~any one of claims 1 to 26~~, ~~for example said vector comprises a polynucleotide of any one of claims 39 to 46.~~

39-46. (Cancelled).

47. (Original) A stably transformed or transfected recombinant host cell comprising the vector of claim 38.

48. (Currently Amended) The stably transformed or transfected recombinant host cell of claim 47 comprising a first vector comprising a polynucleotide selected from the group of: SEQ.I.D.NO: 17, SEQ.I.D.NO: 19, SEQ.I.D.NO: 54, and SEQ.I.D.NO: 56 and a second vector comprising a polynucleotide selected from the group of: SEQ.I.D.NO: 18 SEQ.I.D.NO: 20, SEQ.I.D.NO: 55, and SEQ.I.D.NO: 57.

49-51. (Cancelled).

52. (Currently Amended) The host cell of ~~any one of claims 47 to 51~~ claim 47 wherein said host cell is vertebrate cell.

53. (Original) The host cell of claim 52 wherein said cell is mammalian.

54. (Original) The host cell of claim 53 wherein said cell is CHO or NS0.

55. (Currently Amended) A process for the manufacture of a therapeutic antibody or comprising the step of culturing a host cell of ~~any one of claims 47 to 51~~ claim 47.

56. (Currently Amended) An antibody or antigen binding fragment which competitively inhibits the binding of the therapeutic antibody of claim 15 with OSM, ~~particularly hOSM,~~

~~more particularly Site II of hOSM~~ in an ELISA based assay with the proviso that the competing antibody does not comprise a CDRH3 of SEQ.I.D.NO:42.

57. (Original) A pharmaceutical composition comprising the competing antibody of claim 56.

58. (Currently Amended) A method of treating a human patient afflicted with a disease or disorder responsive to modulation of the interaction between hOSM and gp130 ~~(such as an arthritic disease e.g. rheumatoid arthritis and/or osteoarthritis)~~ which method comprises the step of administering to said patient a therapeutically effective amount of the composition of claim 57.

59. (Currently Amended) The method of claim 36, wherein the Use of a therapeutic antibody which specifically binds the protein backbone of glycosylated hOSM (such as the antibody of claim 15 or 17) in the manufacture of a medicament for the treatment of a and the disease or disorder is selected from the group consisting of;

an arthritic disease, ~~such as~~ rheumatoid arthritis, juvenile onset arthritis, psoriatic arthritis, ankylosing spondylitis, psoriasis, ~~such as~~ chronic plaque disease, inflammatory lung disease, ~~such as~~ COPD, ~~or~~ severe asthma, MS, dementia, ~~such as~~ Alzheimer's disease, pain, ~~such as~~ neuropathic pain, ~~or~~ inflammatory pain, atherosclerosis, diseases of cell cycle regulation, ~~such as~~ cancer ~~(e.g. prostate)~~, and myeloma.

60. (Original) A pharmaceutical composition comprising a first therapeutic antibody which specifically binds hOSM and modulates the interaction between Site II of hOSM and gp130 and a second therapeutic antibody which specifically binds hOSM and modulates the interaction between Site III of hOSM and OSMR β and/or LIFR.

61. (Original) A pharmaceutical composition comprising a bispecific therapeutic antibody which binds hOSM and modulates the interaction between both (a) Site II of hOSM and gp130 and (b) Site III of hOSM and OSMR β and/or LIFR.

62. (Original) A pharmaceutical composition comprising at least a first antagonist that binds hOSM and modulates the interaction between both (a) Site II of hOSM and gp130 and (b) Site III of hOSM and OSMR β and/or LIFR.
63. (Currently Amended) A pharmaceutical composition comprising at least a first antagonist (~~e.g. a proteinaceous antagonist such as an antibody~~) that binds gp130 and/or OSMR β and/or LIFR and modulates the interaction (~~e.g. inhibits or blocks~~) the interaction between (a) gp130 and hOSM and (b) OSMR β and/or LIFR and hOSM.
64. (Cancelled).
65. (Currently Amended) A method of screening an antibody that putatively binds OSM, particularly hOSM (~~e.g. an antibody which has been raised against OSM/hOSM~~), which method comprises;
- (a) incubating said antibody with glycosylated OSM, ~~particularly glycosylated hOSM~~, under conditions permissive for binding;
 - (b) measuring the binding affinity of said antibody; and
 - (c) selecting said antibody if said antibody has a binding affinity of greater than 1 μ M, ~~typically greater than 100nM~~.
66. (Currently Amended) The method of claim 65 ~~any one of claims 64 or 65~~ wherein the OSM has been glycosylated by a mammalian host cell such as CHO.
67. (Currently Amended) The method of claim ~~64 or 65~~ wherein the hOSM is native glycosylated hOSM.
68. (Currently Amended) The method of claim 67 wherein the hOSM has been isolated from the synovial fluid of a human, ~~particularly a human afflicted with an arthritic disease such as RA~~.
69. (Currently Amended I) An antibody identified by the method of ~~any one of claims 65 to 68~~ claim 65.

70. (Original) A pharmaceutical composition comprising the antibody of claim 69 and a pharmaceutically inert carrier.
71. (Currently Amended) A therapeutic antibody of claim 1 which ~~in addition to being~~ is capable of binding hOSM ~~is also capable of binding~~ and cOSM.
72. (Currently Amended) A method of detecting hOSM in a biological sample, ~~particularly human synovial fluid or human sera~~ which method comprises using a Site III antibody as a capture antibody in an ELISA based assay.
73. (Original) The method of claim 72 wherein the ELISA based assay is essentially example 16.
74. (New) The therapeutic antibody of claim 1, wherein said OSM is human OSM.
75. (New) The method of claim 32 wherein said human patient is afflicted with asthma and/or COPD.
76. (New) The method of claim 36, wherein the disease is selected from the group consisting of: rheumatoid arthritis, osteoarthritis, psoriasis, asthma, and COPD.
77. (New) The method of claim 65, further comprising:
- (d) providing a polynucleotide encoding said antibody of step (c) and transforming or transfecting a mammalian host cell with a vector comprising said polynucleotide;
 - (e) culturing said host cell of step (d) under conditions permissive for secretion of said antibody into the culture media;
 - (f) optionally purifying the culture media of step (e); and
 - (g) incorporating the antibody of step (e) or (f) into a pharmaceutical composition.

78. (New) A polynucleotide encoding a polypeptide selected from the group consisting of: SEQ.I.D.NO: 9, SEQ.I.D.NO: 10, SEQ.I.D.NO: 11, SEQ.I.D.NO: 12, SEQ.I.D.NO: 48, SEQ.I.D.NO: 49, SEQ.I.D.NO: 50, and SEQ.I.D.NO: 51.